Claims 1, 2, 5, 6, and 10 stand rejected under 35 U.S.C. §102(e) as being anticipated by Crosswhite. Applicant has amended independent claim 1 to more clearly define, among other things, collecting initial sensor data over a wireless channel from at least one sensor, correlating the collected initial sensor data, and receiving additional data over the wireless channel from the at least one sensor. As applied to the claims as amended, Applicant respectfully traverses the rejection.

Crosswhite fails to teach or suggest at least collecting initial sensor data over a wireless channel from at least one sensor, correlating the collected initial sensor data, or receiving additional data over the wireless channel from at least one sensor. Further, Crosswhite fails to teach or suggest predicting transient errors in the received additional data using the correlating, or correcting the predicted transient errors based at least in part on the correlating. Crosswhite, instead, is directed to forecasting a dependent variable in a future time period that is later than the next, upcoming future time period (Abstract).

Particularly, in Crosswhite, a number of time periods ("n") to look ahead is set (step 15, FIG. 1A; C10, L54-60), and this future time period is later than the next, upcoming future time period (Abstract). This number provides the time period for which the forecast will be made most accurate (C10, L55-60). Crosswhite works with a forecast that is as optimal as possible for the time period in which a user must make a decision (C5, L4-8). Crosswhite thus teaches optimizing the parameters of the forecast for situations where the optimal forecast for a period in the future is preferred over the optimal forecast for the present period (C5, L48-50). By contrast, the invention defined in claim 1 corrects predicted transient errors in data that have been already received.

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Though the Office Action cites step 20 in Fig. 1B for predicting errors, this step requires calculating a forecast for periods beyond a present data point, and at this time no data representing that data point has been collected. Thus, the calculated error provided in step 23 as shown in Fig. 1C (also cited in the Office Action) does not apply to collected data.

Further, the revised values shown in step 28 in Fig. 1C, cited for correcting the transient errors, do not correct predicted transient errors in any particular data collected, let alone data collected from a sensor over a wireless channel, but instead correct forecasting parameters. To that end, the values revised in step 28 do not refer to data, but rather to forecasting parameters that are themselves used to predict values at some point in the future. Thus, steps 26 and 28, cited in the Office Action for correcting transient errors in collected data, take place before such data would be collected, and do not apply to data at all, but rather to parameters used for forecasting.

Accordingly, Applicant respectfully submits that claim 1 and dependent claims 2, 5, and 6 are allowable over the references of record, including Crosswhite. Additionally, regarding dependent claim 2, the Office Action cites step 18 as teaching delaying data, but the claim actually defines that the correcting of the transient errors includes delaying the data. Again, step 18 is directed to selecting up to "n" periods from the end of historical data, and thus there would be no data collected for which transient errors would be an issue.

Applicant additionally notes that claim 10 currently stands rejected as being anticipated by Crosswhite, even though this claim depends from independent claim 8, which is not the basis of an anticipation rejection, but instead is rejected under 35 U.S.C. §103(a) as being

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unpatentable over the combination of Crosswhite and King. For at least this reason, the rejection of claim 10 under 35 U.S.C. §102 is improper.

Claims 3, 4, 7-9, and 11-25 stand rejected under 35 U.S.C. §103(a) as being unpatentable in view of Crosswhite (as applied to claim 2) and further in view of King. Applicant respectfully traverses the rejection for at least the reasons stated above regarding Crosswhite, and for at least the additional reason that King fails to remedy the deficiencies of Crosswhite regarding the claims. King is cited for tuning an amount of delay to a particular wireless sensor network. However, King instead teaches determining time in a GPS receiver (C3, L49-51) by capturing wirelessly received data (steps 304 and 404), not correcting the wirelessly received data. Thus, neither reference teaches or suggests correlating collected initial sensor data, predicting transient errors in received additional data using the correlating, and correcting the predicted transient errors based at least on part on the correlating, as defined in independent claim 1. Similarly, neither reference teaches or suggests receiving sensor data over a wireless channel from at least one sensor, where the received sensor data includes initial sensor data and additional sensor data, where the device is configured to generate offline a predictive model at least partly based on per sensor redundancy in the initial sensor data, and where the device is further configured to determine partly based on the predictive model whether to correct the additional data received from at least one sensor, as defined in independent claim 8.

Crosswhite clearly fails to teach or suggest these features for at least the reason that it does not teach receiving sensor data over a wireless channel from at least one sensor, nor does it teach or suggest determining whether to correct additional data received from the sensor. King also

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fails to teach or suggest these features, as it does not correct data or determine whether to correct data received from a sensor, but rather it uses sensor (e.g., satellite) data to set or calibrate internal clock time (C7, L48-58; C8, L1-5). In addition, Crosswhite is directed only to determining a forecasting equation for forecasts of values that are in a future time period (Abstract) and thus are not yet collected. For at least these reasons, the modifications suggested in the Office Action to Crosswhite in view of King would not be obvious to one of ordinary skill in the art. Thus, King not only fails to remedy the deficiencies of Crosswhite regarding claims 3 and 4, but King also fails to remedy the deficiencies of Crosswhite regarding parent claims 1 and 2. The rejection of independent claim 8 is traversed for similar reasons, and for at least the additional reason that Crosswhite fails to teach a network having the sensor and device features claimed. Regarding claim 9, the rejection is respectfully traversed for at least the reasons stated above regarding independent claim 8 as applied to Crosswhite and King.

Regarding independent claim 11, neither Crosswhite nor King teaches or suggests at least a second logic configured to determine while online whether to correct additional observed data received wirelessly from at least one sensor node based on a predictive model. Crosswhite, as stated above, does not correct additional observed data received wirelessly from at least one sensor node, but rather adjusts parameters for forecasting events that are in the future (Abstract). King additionally fails to teach or suggest correcting additional observed data received wirelessly from at least one sensor note based on a predictive model, but instead uses observed data received wirelessly to set or calibrate an internal clock. The Office Action cites step 20 in Fig. 1B of Crosswhite for teaching the predictive model, and steps 26 and 28 in Crosswhite for teaching the claimed

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determining partly based on the predictive model whether to correct observed data (now defined as additionally observed data received wirelessly), but these steps fail to teach or suggest the claimed features for at least the reasons stated above regarding claims 1 and 8. The rejection of dependent claims 12-14 is traversed for at least the reasons stated above regarding independent claim 11.

The rejection of independent claims 15 and 22 and their dependent claims is respectfully traversed for at least the reasons stated above. Additionally, the Office Action states that claim 15 is rejected for the same reasons as per (original) claim 8, but claim 15 further defines collecting initial sensor data for one or more sensors nodes in a network and preprocessing initial sensor data to determine the level of inherent temporal redundancy in initial sensor data. There is no citation in Crosswhite for teaching or suggesting these steps, and thus the rejection is unsupported.

Claim 15 has also been amended to further define at least wirelessly receiving an additional sensor reading from the one or more sensor nodes. Crosswhite fails to teach or suggest this feature. The claimed feature of determining whether a value of the additional sensor reading is reliable with respect to the likely value, and, if not, correcting the value of the additional sensor reading, is neither taught nor suggested by Crosswhite or King.

Regarding claim 22 and its dependent claims 23-25, Applicant respectfully traverses the rejection for at least the reasons stated above regarding independent claim 8, and for at least the additional reason that claim 22 as amended further defines wirelessly receiving a value from the sensor node, which is neither taught nor suggested by Crosswhite. The claimed feature of determining whether the value received from the sensor node is reliable with respect to the likely

value, and, if not, correcting the value received from the sensor node, is neither taught nor suggested by either Crosswhite or King.

Additionally, Applicant submits new claim 26, which depends from independent claim 15. This new claim further defines at least that the inherent temporal redundancy of the initial sensor comprises per-node redundancy for each of a plurality of sensor nodes. This new claim finds clear support in the present application as filed and does not introduce new matter. Applicant further submits that this feature is neither taught nor suggested by either Crosswhite or King, and thus allowability of new claim 26 is requested for at least these reasons, in addition to those described above regarding claim 15.

For at least the above reasons, Applicant respectfully submits that this case is in condition for allowance, which is respectfully requested. The Examiner is invited to contact Applicant's attorney at the number listed below if an interview would expedite prosecution.

If a Petition under 37 C.F.R. §1.136(a) for an extension of time for response is required to make the attached response timely, it is hereby petitioned under 37 C.F.R. §1.136(a) for an extension of time for response in the above-identified application for the period required to make the attached response timely. The Commissioner is hereby authorized to charge fees which may be required to this application under 37 C.F.R. §§1.16-1.17, or credit any overpayment, to Deposit Account No. 07-2069.

Respectfully submitted,

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